**IN THE CLAIMS:**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with strikethrough. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims 1, 5, 6, and 8 and ADD new claims 17 and 18 in accordance with the following:

1.      (Currently Amended) A method of inspecting an ink-jet printer carriage home position, comprising:

moving the carriage in a first direction until the carriage is not moved for a first predetermined period of time and determining a current position of the carriage as a first position using a maximum moving distance of the carriage when the carriage is not moved for the first predetermined period of time;

moving the carriage in a second direction until the carriage is not moved for a second predetermined period of time and determining a current position of the carriage as a second position when the carriage is not moved for the second predetermined period of time;

determining that an error exist in the home position, if a ~~sum of~~ distance between the first position and the second position is not same as the maximum moving distance of the carriage, or when a second currently-determined position is not same as a second previously-determined position; and

determining that an error does not exist, if the ~~sum of~~ distance between the first position and the second position is same as the maximum moving distance of the carriage and the second currently-determined position is same as the second previously-determined position;

wherein the first and second directions correspond to a direction away from the home position and to a direction towards the home position, respectively.

2.      (Original) The method of claim 1, wherein the maximum moving distance of the carriage corresponds to a size of a frame installed on a moving route of the carriage.

3.      (Original) The method of claim 1, wherein

if the carriage is not moved in the first direction for the first predetermined period of time, the maximum moving distance of the carriage is determined as the first position, and the first position is counted downward while moving the carriage in the second direction, and

if the carriage is not moved in the second direction for the second predetermined period of time, the downward-counting result, carried out until the carriage is not moved any more, is determined as the second position, and

if the second position is '0' and the second currently-determined position is the same as the second previously-determined position, the error is determined not to exist in the home position, and if the second position is not '0', the error is determined to exist in the home position.

4.      (Original)  The method of claim 1, wherein,

if the carriage is not moved in the first direction for the first predetermined period of time, '0' is determined as the first position, and the first position is counted upward while moving the carriage in the second direction, and

if the carriage is not moved in the second direction for the second predetermined period of time, the upward-counting result, carried out until the carriage is not moved any more, is determined as the second position, and

if the second position is the maximum moving distance of the carriage and the second currently-determined position is the same as the second previously-determined position, the home position error is determined not to exist, and if the second position is not the maximum moving distance of the carriage, the home position error is determined to exist.

5.      (Currently Amended)  The method of claim 1, wherein, when the ~~sum of~~ distance between the first position and the second position is not the same as the maximum moving distance of the carriage, or when the second currently-determined position is not the same as the second previously-determined position, if a number of times of determining the first position is not n-times, the carriage is moved in the first direction, and if the number of times of determining the first position is n-time, the home position error is determined to exist.

6.      (Currently Amended)  The method of claim 1, wherein, when the ~~sum of~~ distance between the first position and the second position is not the same as the maximum moving distance of the carriage, or when the second currently-determined position is not the same as the second previously-determined position, if a number of times of determining the second position is not n-times, the carriage is moved in the first direction, and if the number of times of determining the second position is n-times, the home position error is determined to exist.

7. (Original) The method of claim 1, wherein the first predetermined period of time is same as the second predetermined period of time.

8. (Currently Amended) An apparatus included in an ink-jet printer having a carriage driven by a direct current (DC) motor and inspecting a home position of the carriage, the apparatus comprising:

a carriage mover moving the carriage in a first direction away from a home position of the carriage in response to a first control signal or moving the carriage in a second direction towards the home position, in response to a position determination signal and a second control signal;

a movement inspector inspecting whether the carriage is moved in the first direction, outputs a result of the inspection as the first control signal, inspects whether the carriage is moved in the second direction, and outputs a result of the second direction inspection as the second control signal;

a position determiner determining a current position of the carriage as a first position, using a maximum moving distance of the carriage, in response to the first control signal from the movement inspector, generating the position determination signal, which indicates whether the first position is determined, to the carriage mover to begin moving the carriage in the second direction, and determining a current position of the carriage as a second position, using the first position, in response to the second control signal from the movement inspector;

a storage unit storing the second position;

a position adder ~~adding~~ calculating the distance between the first position ~~to~~ and the second position;

a first comparator comparing ~~a sum of~~ the distance between the first position and the second position input from the position addition unit with the maximum moving distance of the carriage and outputting a result of the comparing as a first error determination signal;

a second comparator comparing a second currently-determined position input from the position determiner with the second previously-determined position read from the storage unit and outputting a result of the comparing as a second error determination signal, in response to the first error determination signal; and

an error determiner determining whether an error exists in the home position in response to the first and second error determination signals.

9.    (Original)  The apparatus of claim 8, wherein

the carriage mover moves the carriage in the second direction in response to the position determination signal and the second control signal and counts the first position downward,

the position determination unit determines the maximum moving distance of the carriage as the first position in response to the first control signal, outputs the position determination signal, and determines a result of the downward-counting input from the carriage mover as the second position, in response to the second control signal, and

the first comparison unit compares the second position with '0' and outputs a result of the comparing as the first error determination signal.


10.    (Original)  The apparatus of claim 8, wherein

the carriage mover moves the carriage in the second direction in response to the position determination signal and the second control signal and counts the first position upward,

the position determination unit determines '0' as the first position in response to the first control signal, outputs the position determination signal and determines a result of the upward-counting input from the carriage mover as the second position, in response to the second control signal, and

the first comparison unit compares the second position with the maximum moving distance of the carriage and outputs a result of the comparing as the first error determination signal.


11.    (Original)  The apparatus of claim 8, further comprising a generation times inspector inspecting whether the first position is determined n-times in response to the second error determination signal and outputs a result of the inspecting as a third error determination signal,

wherein the carriage mover moves the carriage in the first direction in response to the third error determination signal, and the error determination unit determines whether the error exists in the home position in response to the third error determination signal.

12.     (Original) The apparatus of claim 8, further comprising a generation times inspector inspecting whether the second position is determined n-times in response to the second error determination signal and outputs a result of the inspecting as a third error determination signal,

wherein the carriage mover moves the carriage in the first direction in response to the third error determination signal, and the error determination unit determines whether the error exists in the home position in response to the third error determination signal.

13.     (Original) An ink-jet printer having a carriage driven by a direct current (DC) motor, the printer comprising:

a carriage mover moving the carriage in a first direction opposite to a home position of the carriage in response to a first control signal controlling the carriage movement or moving the carriage in a second direction of the home position, in response to a position determination signal and a second control signal controlling the carriage movement;

a position determiner determining a current position of the carriage as a first position, using a maximum moving distance of the carriage, in response to the first control signal indicating that the carriage is not moved for a predetermined period of time in the first direction, generating the position determination signal to the carriage mover to begin moving the carriage in the second direction, and determining a current position of the carriage as a second position, using the first position, in response to the second control signal indicating that the carriage is not moved for the predetermined period of time in the second direction;

a storage unit storing the second position; and

a carriage error determiner determining an error in the carriage home position if a sum of the first position and the second position is not same as the maximum moving distance of the carriage or a second currently-determined position is not same as a second previously-determined position read from the storage unit.

14.    (Original)  The printer of claim 13, wherein

the carriage mover moves the carriage in the second direction in response to the position determination signal and the second control signal and counts the first position downward,

the position determination signal determines the maximum moving distance of the carriage as the first position in response to the first control signal indicating that the carriage is not moved for a predetermined period of time in the first direction, outputs the position determination signal, and determines a result of the downward-counting as the second position, in response to the second control signal indicating that the carriage is not moved for a predetermined period of time in the second direction, and

the carriage error determiner compares the second position with '0' to determine the error in the carriage home position.

15.    (Original)  The printer of claim 13, wherein

the carriage mover moves the carriage in the second direction in response to the position determination signal and the second control signal and counts the first position upward,

the position determination signal determines '0' as the first position in response to the first control signal indicating that the carriage is not moved for a predetermined period of time in the first direction, outputs the position determination signal, and determines a result of the upward-counting input as the second position, in response to the second control signal indicating that the carriage is not moved for a predetermined period of time in the second direction, and

the carriage error determiner compares the second position with the maximum moving distance of the carriage to determine the error in the carriage home position.

16.    (Original)  The printer of claim 13, wherein the carriage mover stops moving the carriage in response to the first control signal or the second control signal indicating that the carriage is not moved for the predetermined period of time.

Please ADD new claims 17 and 18 as follows:

17.    (NEW)  A method of inspecting a home position of an ink-jet printer having a carriage, the method comprising:

moving the carriage in a first direction;

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determining a current position of the carriage as a first position when the carriage is not moved for a first predetermined period of time;

moving the carriage in a second direction opposite to the first direction;

determining a current position of the carriage as a second position when the carriage is not moved for a second predetermined period of time;

comparing a distance between the first position and the second position with a maximum moving distance of the carriage;

comparing the second position with a second currently-determined position; and

if the distance between the first position and the second position is not the same as the maximum moving distance of the carriage or if the second position is not the same as the second currently-determined position, determining that an error exists in the home position.

18.    (NEW)  The method of claim 17, further comprising informing a user that an error exists in the home position.